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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/986,452	11/08/2001	Yehuda HersHKovits	P-3864-US	5080

27130 7590 06/17/2004

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EXAMINER

SWERDLOW, DANIEL

ART UNIT	PAPER NUMBER
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2644

DATE MAILED: 06/17/2004

19

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/986,452

Applicant(s)

HERSHKOVITS ET AL.

Examiner

Daniel Swerdlow

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 29-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 29-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 13 April 2004 has been entered.

Declaration Under 37 CFR 1.131

2. The declaration filed on 22 March 2004 under 37 CFR 1.131 has been considered but is ineffective to overcome the Pecone reference.

3. The evidence submitted is insufficient to establish a conception of the invention prior to the effective date of the Pecone reference. While conception is the mental part of the inventive act, it must be capable of proof, such as by demonstrative evidence or by a complete disclosure to another. Conception is more than a vague idea of how to solve a problem. The requisite means themselves and their interaction must also be comprehended. See *Mergenthaler v. Scudder*, 1897 C.D. 724, 81 O.G. 1417 (D.C. Cir. 1897).

4. Regarding Claims 29 through 31, the exhibit submitted with the declaration does not show possession of the claimed invention at least because these claims are method claims including the step of "receiving a failure indication associated with a front card". There is no depiction or other indication in the exhibit of "a failure indication".

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5. Regarding Claim 32, the exhibit submitted with the declaration does not show possession of the claimed invention at least because the claim includes the structural limitation "comprising an isolation relay". There is no depiction or other indication in the exhibit of "an isolation relay".

6. Regarding Claims 33 and 34, the exhibit submitted with the declaration does not show possession of the claimed invention at least because the claims include the structural limitation "comprising a control circuit". There is no depiction or other indication in the exhibit of "a control circuit".

7. Further, the declaration is defective because it lacks a statement in compliance with 37 CFR 1.68, which states:

Any document to be filed in the Patent and Trademark Office and which is required by any law, rule, or other regulation to be under oath may be subscribed to by a written declaration. Such declaration may be used in lieu of the oath otherwise required, if, and only if, the declarant is on the same document, warned that willful false statements and the like are punishable by fine or imprisonment, or both (18 U.S.C. 1001) and may jeopardize the validity of the application or any patent issuing thereon. The declarant must set forth in the body of the declaration that all statements made of the declarant's own knowledge are true and that all statements made on information and belief are believed to be true.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 29 through 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pecone (US 2003/0065733 A1) in view of Wachel (US 2002/0078395 A1).

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9. Regarding Claim 29, Pecone discloses a **PCI bus** (Fig. 6, reference 116) **used to enable exclusive communications (i.e., establish a connection) between a** channel interface module (Fig. 6, reference 136) that corresponds to the **rear I/O card claimed and a** controller memory module (Fig. 6, reference 108) that corresponds to the **second front card claimed when failure of a** controller memory module (Fig. 6, reference 104) that corresponds to the **first front card** claimed and is **connected** to the channel interface module that corresponds to the **rear I/O card** claimed **via** a common bus (Fig. 2, reference 134, 120, 146) **is detected (i.e., indicated)** (Paragraph 49). Therefore, Pecone anticipates all elements of Claim 29 except the interconnection of the modules via a through connection. Wachel discloses through connections of cards on a midplane (Fig. 2, reference 153; paragraph 17, lines 7-11). It would have been obvious to one skilled in the art at the time of the invention to apply a midplane with through connections as taught by Wachel to the modular architecture taught by Pecone for the purpose of simplifying maintenance as suggested by Wachel (paragraph 13, lines 6-11).

10. Regarding Claim 30, Pecone discloses **connecting a** channel interface module (Fig. 6, reference 136) that corresponds to the **rear I/O card claimed to a portion (i.e., a set of midplane traces) of a PCI bus** (Fig. 6, reference 128) **upon** detection of failure of (i.e., **receiving a failure indication associated with**) a controller memory module (Fig. 6, reference 104) that corresponds to the **front card** claimed (Paragraph 49) and is **connected** to the channel interface module that corresponds to the **rear I/O card** claimed **via** a common bus (Fig. 2, reference 134, 120, 146). Therefore, Pecone anticipates all elements of Claim 29 except the interconnection of the modules via a through connection. Wachel discloses through connections of cards on a midplane (Fig. 2, reference 153; paragraph 17, lines 7-11). It would have been obvious to one

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skilled in the art at the time of the invention to apply a midplane with through connections as taught by Wachel to the modular architecture taught by Pecone for the purpose of simplifying maintenance as suggested by Wachel (paragraph 13, lines 6-11).

11. Regarding Claim 31, as shown above apropos of Claim 29, Pecone discloses using (i.e., **allocating at least a portion of) a PCI bus for communication between a** channel interface module (Fig. 6, reference 136) that corresponds to the **rear card** claimed **and a** controller memory module (Fig. 6, reference 108) that corresponds to the **backup front card** claimed **upon** detection of failure of (i.e., **receiving a failure indication associated with) a** controller memory module (Fig. 6, reference 104) that corresponds to the **front card** claimed (Paragraph 49) and is **connected** to the channel interface module that corresponds to the **rear I/O card** claimed **via a** common bus (Fig. 2, reference 134, 120, 146). Therefore, Pecone anticipates all elements of Claim 29 except the interconnection of the modules via a through connection. Wachel discloses through connections of cards on a midplane (Fig. 2, reference 153; paragraph 17, lines 7-11). It would have been obvious to one skilled in the art at the time of the invention to apply a midplane with through connections as taught by Wachel to the modular architecture taught by Pecone for the purpose of simplifying maintenance as suggested by Wachel (paragraph 13, lines 6-11).

12. Regarding Claim 32, Pecone discloses a switched PCIX arrangement (Fig. 6, reference 208, 212; paragraph 41) that corresponds to the **isolation relay** claimed and **routes signals from** a channel interface module (Fig. 6, reference 136) that corresponds to the **rear card** claimed **to a** controller memory module (Fig. 6, reference 108) that corresponds to the **backup front or rear card** claimed **through a PCI bus** (Fig. 5, reference 116) **upon receiving a** command generated upon failure of (i.e., **failure indication associated with) a** controller memory module (Fig. 6,

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reference 104) that corresponds to the **front card** claimed (Paragraph 49) and is **connected** to the channel interface module that corresponds to the **rear I/O card** claimed **via** a common bus (Fig. 2, reference 134, 120, 146). Therefore, Pecone anticipates all elements of Claim 29 except the interconnection of the modules via a through connection. Wachel discloses through connections of cards on a midplane (Fig. 2, reference 153; paragraph 17, lines 7-11). It would have been obvious to one skilled in the art at the time of the invention to apply a midplane with through connections as taught by Wachel to the modular architecture taught by Pecone for the purpose of simplifying maintenance as suggested by Wachel (paragraph 13, lines 6-11).

13. Regarding Claim 33, Pecone discloses a switched PCIX arrangement (Fig. 6, reference 208, 212; paragraph 41) that corresponds to the **control circuit** claimed and **redirects communications from a** channel interface module (Fig. 6, reference 136) that corresponds to the **rear card** claimed **to a** controller memory module (Fig. 6, reference 108) that corresponds to the **second front card** claimed **upon receiving** a command generated upon failure of (i.e., **an indication signal associated with**) a controller memory module (Fig. 6, reference 104) that corresponds to the **front card** claimed (Paragraph 49) and is **connected** to the channel interface module that corresponds to the **rear I/O card** claimed **via** a common bus (Fig. 2, reference 134, 120, 146). Therefore, Pecone anticipates all elements of Claim 29 except the interconnection of the modules via a through connection. Wachel discloses through connections of cards on a midplane (Fig. 2, reference 153; paragraph 17, lines 7-11). It would have been obvious to one skilled in the art at the time of the invention to apply a midplane with through connections as taught by Wachel to the modular architecture taught by Pecone for the purpose of simplifying maintenance as suggested by Wachel (paragraph 13, lines 6-11).

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14. Regarding Claim 34, Pecone further discloses the failure associated command that corresponds to the indication claimed going from the channel interface module (Fig. 6, reference 136) that corresponds to the **rear card** claimed to (i.e., **received by**) a controller memory module (Fig. 6, reference 108) that corresponds to the **second front card** claimed **over a PCI bus** (Fig. 5, reference 116).

Response to Arguments

15. Applicant's declaration under 37 CFR 1.131 is ineffective for reasons stated above. As such, applicant's arguments relating to that declaration are moot.

16. Applicant's arguments filed 31 March 2004 have been fully considered but they are not persuasive.

17. Applicant alleges that Pecone does not deal with telecommunications transmissions (Remarks: p. 6, last paragraph). Examiner respectfully disagrees. Pecone discloses connection to a host computer and storage devices via a host channel and a disk channel, respectively (paragraph 35, lines 14-19). Pecone further discloses these channels as fiber channels (paragraph 42, lines 14-15) with limited bandwidth (paragraph 47, lines 25-27). As such, Pecone deals with telecommunications transmissions.

18. Applicant's arguments with respect to all claims have been considered but are moot in view of the new ground(s) of rejection.

19. Applicant alleges that the claims are patentable over prior art because Pecone does not teach a through connection between the controller memory module that corresponds to the front card claimed and the channel interface module that corresponds to the rear I/O card claimed.

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Examiner respectfully disagrees. As shown above Wachel teaches the use of a midplane architecture with through connections and provides motivation to apply this teaching.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel Swerdlow whose telephone number is 703-305-4088. The examiner can normally be reached on Monday through Friday between 8:00 AM and 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forrester Isen can be reached on 703-305-4386. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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MINSUN OH HARVEY
PRIMARY EXAMINER